

## REMARKS

Claims 1, 3, 4, 6-11, 24-30, 33, 34, 36-38, 40, 42, and 47-51 are pending.

Claims 1, 3, 4, and 6-11 are allowed.

Claims 24-30, 33, 34, 36-38, 40, 42, 47-51 are rejected.

Claims 24-30, 33-34, 36-38, 40, 42, and 47-51 are rejected under 35 U.S.C. 102(e).

Claim 50 is amended to clarify the patentable subject matter.

No new matter is added.

Claims 24-30, 33, 34, 36-38, 40, 42, and 47-51 remain in the case for consideration.

Applicant requests reconsideration and allowance of the claims in light of the above amendments and following remarks.

## Specification

The disclosure is objected to because of the following informalities: this application being a divisional application to 10/192,800, filed 7/9/2002 and now U.S. Patent No. 6,642,627, this related information should be updated in the specification.

The specification has been amended in accordance with the examiner's comments.

## Claim Rejections – 35 U.S.C. § 102

Claims 24-30, 33, 34, 36-38, 40, 42, and 47-51 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 20060033216 to Pflughaupt et al. (“Pflughaupt”) Applicants respectfully traverse the rejections.

Regarding claims 24, 36, and 47, the examiner asserts that the chips in these claims are the same as elements 20 in Pflughaupt. However, elements 20 in Pflughaupt are described as “package elements” and later “panels”. See Pflughaupt [0062] line 2 and [0063] line 1. Pflughaupt goes on to describe elements 20:

“...one embodiment of the invention uses a plurality of package elements 20, each such element being in the form of a circuit panel. Each such circuit panel may include a dielectric layer in the form of a thin, flexible dielectric tape as, for example, a layer of reinforced or unreinforced polyimide, BT resin or the like on the order of 25-100  $\mu\text{m}$  thick, most preferably 25-75  $\mu\text{m}$  thick.

Alternatively, each panel may include a dielectric such as a fiberglass-

reinforced epoxy as, for example, an FR-4 or FR-5 board.” Pflughaupt paragraph [0062].

Further, Pflughaupt specifically teaches that elements 20 are *not* chips. Pflughaupt paragraph [0067] lines 1-10 read:

“The stacked chip assembly includes a plurality of units 56 (FIG. 2). Except as otherwise stated, each unit 56 is identical to each other unit 56 in the stack. Each such unit includes a *panel or chip carrier* 20 as discussed above with reference to FIG. 1 and a chip 58 associated with that panel. Each such chip has a front or contact bearing surface 60 and a rear surface 62. The front surface 60 of each chip has contacts 64 arranged in rows adjacent the center of the chip. The chip also has edges 66 bounding the front and rear surfaces 62.” (Emphasis added)

Therefore, elements 20 disclosed in Pflughaupt are not chips as recited in the claimed invention. Rather, elements 20 are circuit boards upon which chips are mounted.

The chips disclosed in this invention are patentably distinguished from those disclosed in Pflughaupt. The chips in Pflughaupt do not have pad-rearrangement patterns. The chips in Pflughaupt use elements 40, 36, 38, which are discrete elements, to distribute the bond pads away from the center of the chip. Thus, because the chips of claims 24, 36, and 47 are patentably distinguishable from both the chips and elements 20 of Pflughaupt, Applicants respectfully submit that claims 24, 36, and 47 are not anticipated by Pflughaupt and request the allowance of these claims.

Further, the office action proposes that a bond pad wiring pattern is inherent under element 64 in Pflughaupt and that a pad rearrangement pattern (elements 40, 36, and 38) directly contacts the wiring pattern. To the contrary, elements 40, 36, and 38 directly contact element 64, so they couldn’t be directly contacting the bond pad wiring pattern proposed to be inherent under element 64. See Pflughaupt FIG. 2 and paragraph [0069]. Thus, Pflughaupt does not teach or suggest the limitation that the pad rearrangement pattern directly contacts the bond-pad wiring pattern. For this additional reason, Applicants respectfully submit that claims 24, 36, and 47 are not anticipated by Pflughaupt and request allowance of these claims.

Regarding claims 25-30, 33, 34, 37, 38, 40, 42, 48 and 49, these dependent claims all depend from independent claims 24, 36, and 47. Applicants respectfully submit that claims 25-30, 33, 34, 37, 38, 40, 42, 48 and 49 are likewise in proper form for allowance for their dependency and their own merits.

Regarding claim 51, it depends from previously allowed claim 1. Consequently, Applicant believes that claim 51 was inadvertently rejected along with the preceding claims. Applicant respectfully requests that claim 51 be allowed as it depends from allowed claim 1.

Regarding claims 36-38, 40, 42, and 47-51, independent basis for rejecting each of these claims was not provided by the examiner in the office action dated 27 March 2006.

### **Foreign priority**

Applicant will submit translation of the priority documents KR 2001-0041154 and KR 2002-0003030 upon requests if the translations of the priority documents are made of record to overcome the rejections.

### **Conclusion**

For the foregoing reasons, reconsideration and allowance of claims 24-30, 33, 34, 36-38, 40, 42, 47-51 of the application is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,  
MARGER JOHNSON & McCOLLOM, P.C.



---

Hosoon Lee, Reg. No. 56,737

MARGER JOHNSON & McCOLLOM, P.C.  
210 SW Morrison Street, Suite 400  
Portland, OR 97204  
503-222-3613

**Customer No. 20575**